REPLACEMENT Sheet 1 of 23

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Applicants: Ault-Riche et al. Customer No.: 24961
Serial No.: 10/659,113 Filed: October 30, 2003
Examiner: unassigned
Our Docket No.: 25885-1755

or biological particle Displayed molecule

conjugating linker binding partner

capture agent

self-assembled array

capture system

components of the

Fig. 1A

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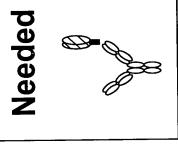
luminol conjugating linker binding partner HRP capture agent binder secondary detection antibody Displayed molecule or biological particle

Fig. 1B

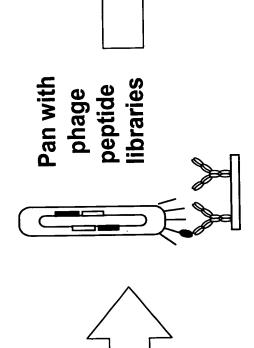
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test for Retention of Binding Identified Binding Partners against Capture Agents to Synthesize and Screen Affinity and Specificity



Start with W look for @

non-immunized mice

Purified lgG

Hybridomas from

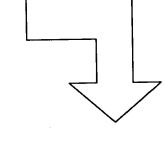
Fig. 2A

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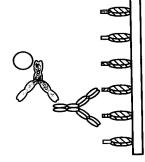
Start with Blook for K

Needed

Immunize mice with designed tags 000000



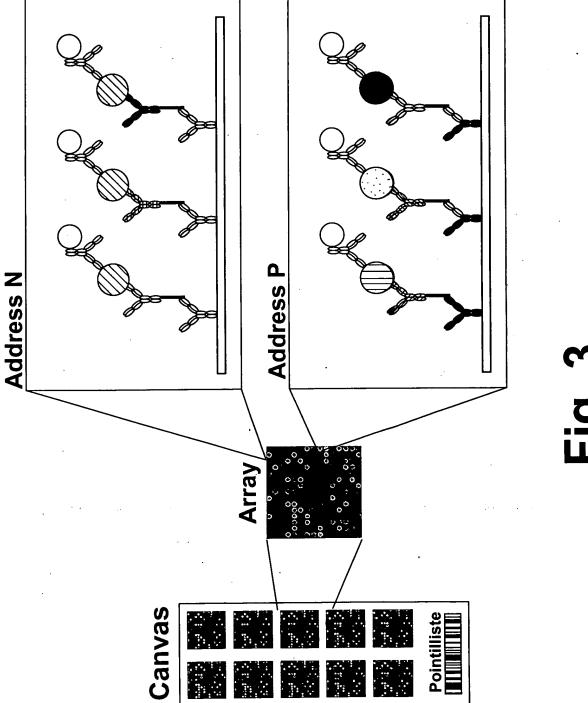




Screen with arrayed tags



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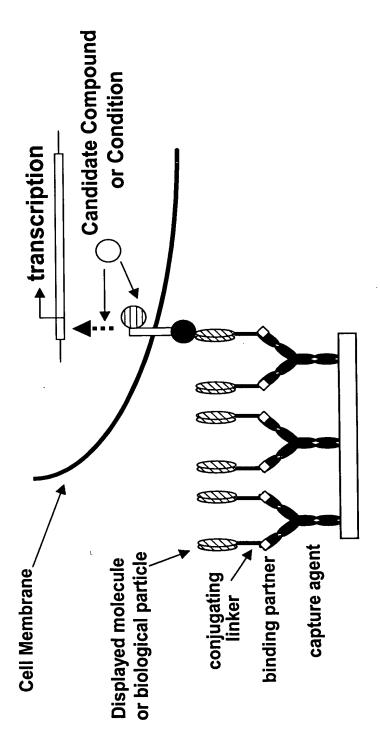
Candidate Compound or Condition **Cell Membrane** capture agent Displayed molecule or biological particle binding partner conjugating linker

Fig. 4A

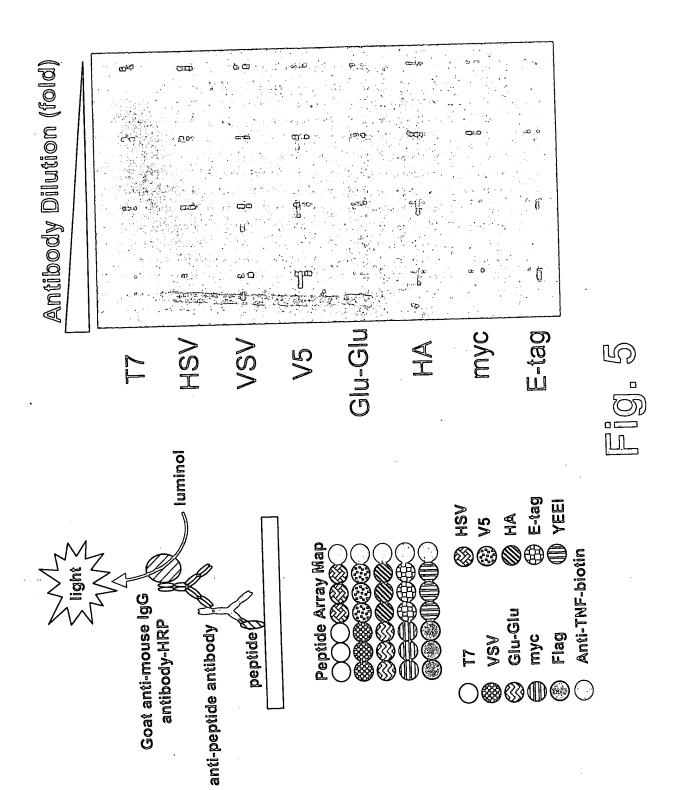
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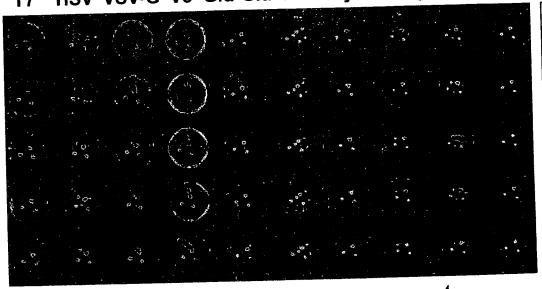


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HSV VSV-G V5 Glu-Glu HA myc E-tag Flag Control



Peptide Dilution

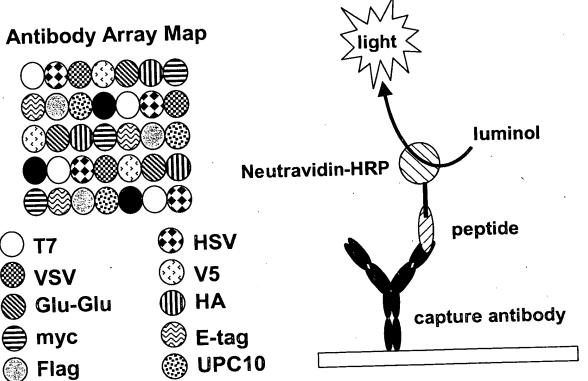


Fig. 6

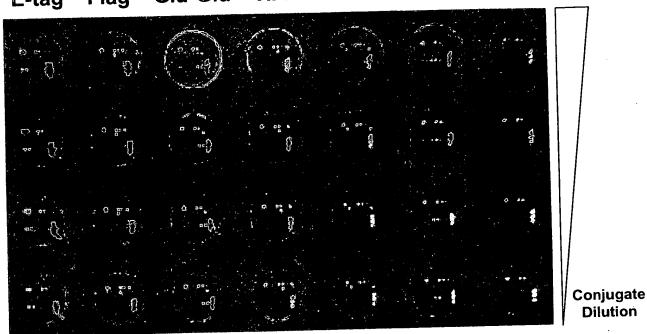
Anti-mouse IgG-HRP

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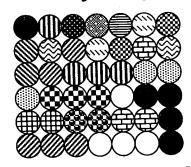
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Control **V5** Glu-Glu **VSV-G** Flag HA E-tag



Antibody Array Map



Myc .

human IgG antibody

Anti-human IgG antibody-HRP

> conjugating peptide capture antibody

- luminol

IFNγ

 $\mathsf{TNF}\alpha$

lag Flag

GM-CSF

Human IgG

Glu-Glu

Albumin

V5

Mouse IgG-HRP

HA

Buffer Control

E-tag

UPC10

Fig. 7

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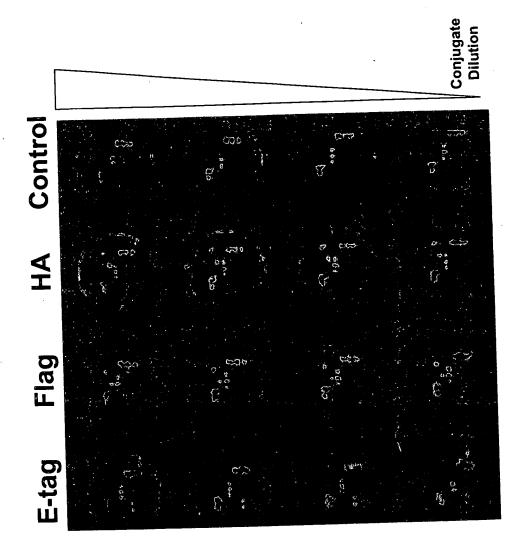
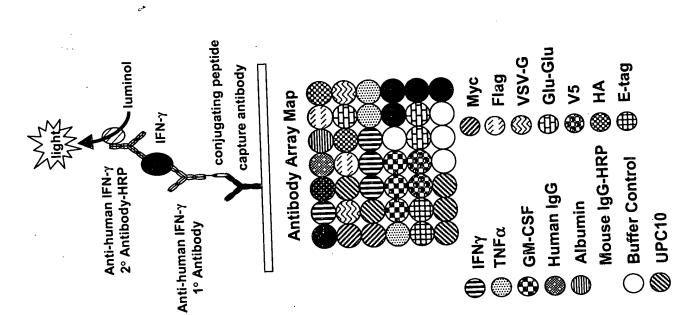
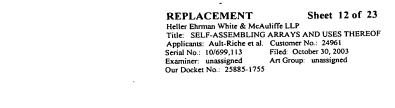


Fig. 8





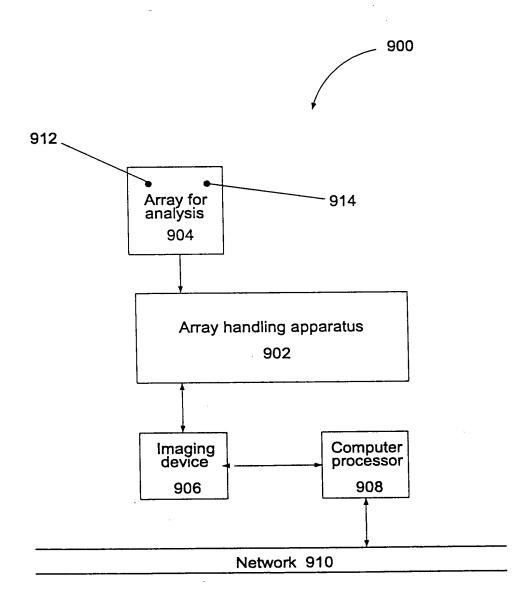
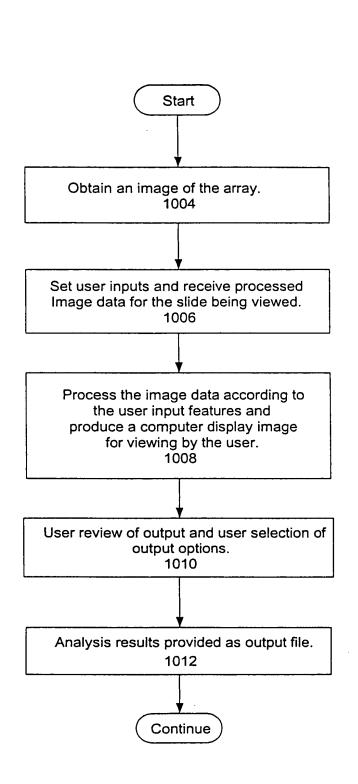


Fig. 9



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Fig. 10

Start Determine an expected locus location for the Next locus of the array. 1102 Monitor the array image pixel data to identify increasing luminosity values. 1104 Identify the center of the locus by noting the maximum luminosity of pixel data. 1106 Calculate loci distances to neighboring loci. 1108 Continue

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Fig. 12

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Fig. 13

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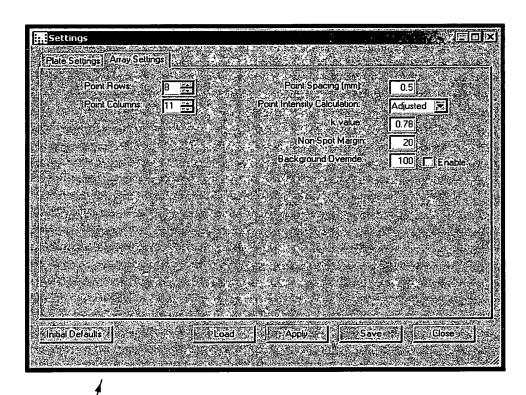


Fig. 14

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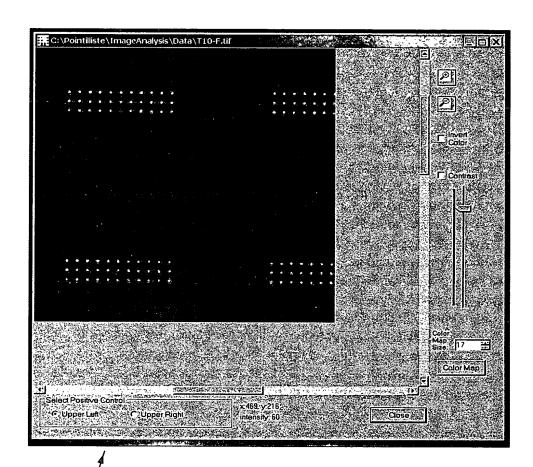


Fig. 15

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Fig. 16

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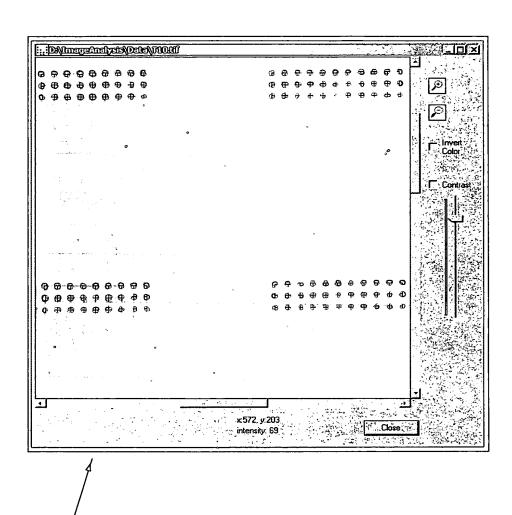


Fig. 17

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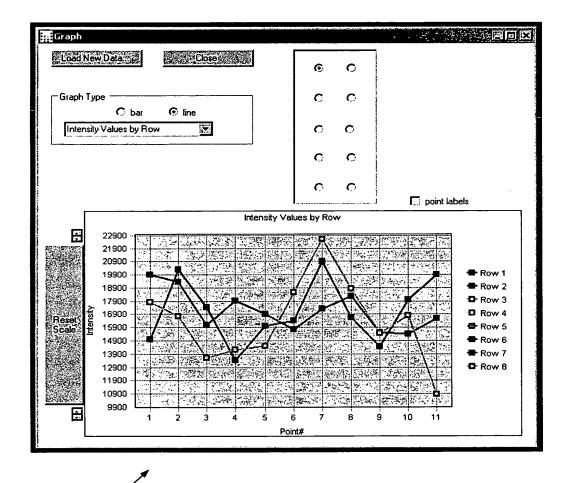


Fig. 18

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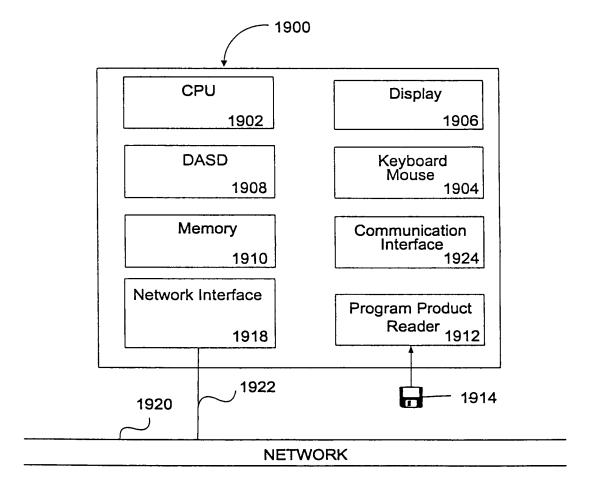


Fig. 19

